

~~Accelerated Method~~ for Determining the Mineral Type of Clay 152-1-14/15

ASSOCIATION: Treat "Mosbassuglegeologiya"

AVAILABLE: Library of Congress

Card 2/2

BEYRON, S.G.; MIKHAYLOVA, Ye.V.

Genozoic underground waters in the southern part of the West  
Siberian Plain [with summary in English]. Sov. geol. 1 no.3:  
112-119 Nr '58. (MIRA 11:5)

1. Zapadno-Sibirskoye geologicheskoye upravleniye.  
(West Siberian Plain—Water, Underground)

MIKHAYLOVA, Ye.V.

Hydrogeology of the Kulunda Steppe and water supply conditions  
in agriculture. Mat.po geol.Zap.Sib. no.62:3-53 '58.

(MIRA 12:8)

(Kulunda Steppe--Water, Underground) (Water supply, Rural)

BEYRON, S.G.; MIKHAYLOVA, Ye.V.; SELIAKOV, S.N.

Zoning the Kulunda Steppe for land improvement purposes. Trudy Biol.  
inst. Sib. otd. AN SSSR no.4:5-17 '59. (MIRA 13:10)  
(Kulunda Steppe--Soils)  
(Kulunda Steppe--Irrigation)

14(5)

SOV/132-59-9-11/13

AUTHOR: Mikhaylova, Ye.V.

TITLE: The Results of Checking the Quality of Drilling Operations in the Moscow Brown Coal Basin

PERIODICAL: Razvedka i okrana nedr, 1959, Nr 9, p 54 (USSR)

ABSTRACT: The author finds that the work of drilling brigades in the Moscow brown coal basin has considerably improved. She compared the calculations made by these brigades with practical results obtained in different mines of the region. It was found that the difference between the assessment of the importance of coal beds by the brigades and the final results of exploitation of these beds was less than 0.1%. I.P. Sharapov and V.S. Ogarkov were mentioned by the author. There are 3 tables.

ASSOCIATION: Tul'skaya geologicheskaya partiya (The Tula Geological Party)

Card 1/1

BEYROM, S.G.; MIKHAYLOVA, Ye.V.

Ground waters in the southeastern part of the West Siberian Plain.  
Geol. i geofiz. no.2:74-86 '60. (MIRA 13:9)

1. Transportno-energeticheskiy institut Sibirskogo otdeleniya  
AN SSSR.

(West Siberian Plain--Water, Underground)

MIKHAYLOVA, Ye.V.

Rock salt in the Moscow Basin. Razved. i okh. nedr 26 no.12:1-4  
D '60. (MIRA 13:12)

1. Tul'kakaya kompleksnaya geologicheskaya ekspeditsiya.  
(Moscow Basin—Salt)

BEYROM, S.G.; MIKHAYLOVA, Ye.V.; NIKOL'SKAYA, Yu.P.

Formation of drainage and chemical composition of underground  
waters in Oligocene deposits in the Irtysh artesian basin. Geol. i  
geofiz. no. 7:43-54 '61. (MIRA 14:9)

1. Transportno-energeticheskiy institut Sibirskogo otdeleniya  
AN SSSR, Novosibirsk.  
(Siberia, Western--Water, Underground)



MIKHAYLOVA, Ye.V.

Walnut forests of Central Asia and silvicultural measures for  
their regeneration. Trudy TashGU no.187:216-223 '61.

(MIRA 15:3)

1. Nauchno-issledovatel'skiy institut lesnogo khozyaystva  
Uzbekskoy Akademii sel'skokhozyaystvennykh nauk.  
(Soviet Central Asia--Walnut)

MIKHAYLOVA, Ye.V.

Underground waters in the south of the West Siberian Plain  
and their practical significance. Mat. Kom. po izuch. podzem.  
vod. Sib. 1 Dal' Vost. no.2:53-59 '62. (MIRA 17:8)

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THEORY OF THE EARTH AND ITS HISTORY. 187

MIKHAYLOVA, Yu. M. Cand. Med. Sci.

Dissertation: "The Influence of the Decomposition Products of Diphtherial Bacteria, Staphylococci and Streptococci on the Activity of the Diphtherial Bacterium and its Toxin." Moscow Medical Inst., Ministry of Health RSFSR., 23 Jun 47.

SO: Vechernyaya Moskva, Jun, 1947 (Project #17836)

MIKHAYLOVA, Yu.M.

Experimental study on the effect of microbial autolysate on the activity of *Corynebacterium diphtheriae* and toxin; author's abstract. Zhur.mikrobiol., epid. i immun. 27 no'8:47-48 Ag '56. (MLRA 9:10)

1. Iz kafedry mikrobiologii Ryazanskogo meditsinskogo instituta.  
(*CORYNEBACTERIUM DIPHTHERIAE*,  
autolysates, eff. on exper. *C. diphtheriae* & *C.*  
*diphtheriae* toxin infect. (Rus))

USSR / Microbiology. Microbes Pathogenic to Man and F-5  
Animals. Bacteria. Bacteria of the Intestinal  
Group.

Abs Jour: Ref Zhur-Biol., No 16, 1958, 72137.

Author : Mikhaylova, Yu. M.

Inst : Not given.

Title : Characteristics of Widal's Reaction in Patients  
With Typhoid and Paratyphoid Illnesses Treated  
with Synthomycin and Levomycetin.

Orig Pub: Antibiotiki, 1957, 2, No 1, 58-59.

Abstract: The author thinks that, contrary to data in the  
literature on the problem of the influence of  
Synthomycin and Levomycetin treatment on Widal's  
reaction, it depends on the use of various meth-  
ods of treatment. The given investigation was  
conducted with strict determination of the treat-

Card 1/2

MIKHAYLOVA, Yu.M.

Treating typhoid fever with antibiotics. Antibiotiki 3 no.4:114  
JL-Ag '58 (MIRA 11:10)

1. Kafedra infektsionnykh bolezney (zav. - prof. K.V. Bunin)  
I Moskovskogo ordena Lenina meditsinskogo instituta i Infektsionnaya  
bol'nitsa g. Ulan-Bator, Mongol'skaya Narodnaya Respublika.  
(TYPHOID FEVER)  
(ANTIBIOTICS)

MIKHAYLOVA, Yu.M., SOBOLEV, V.R. (Moskva)

Antibiotics of the tetracycline group. Vel'd. 1 akush. 23 no.10  
3-7 0 '58 (MIRA 11:11)

(TETRACYCLINE)



SOBOLEV, V.P., MINHAYLOVA, Yu.M., SAVEL'YEVA, A.M. (Moskva)

Penicillin compounds. Fel'd. i akush. 23 no.12:8-11 D'58 (MIRA 11:12)  
(PENICILLIN)

MIKHAYLOVA, Yu.M., SPIVAK, Yu.N.

Effect of synthomycin on complement titer in typhoid fever patients  
and in immunized rabbits; author's abstract. Zhur.mikrobiol.epid.  
i immun. 29 no.7:133-134 J1 '58 (MIRA 11:8)

1. Iz kafedry infektsionnykh bolezney 1-go Moskovakogo ordena Lenina  
meditsinskogo instituta.

(CHLORAMPHENICOL, effects,

on typhoid fever complement titer in infected patients  
& immunized rabbits (Rus))

(TYPHOID FEVER, immunology,

complement titer in infected patients & immunized  
rabbits, eff. of chloramphenicol (Rus))

MIKHAYLOVA, Yu.M.

Effect of levomycetin, chlortetracycline and tetracycline on the complement activity and antibody concentration in experimental conditions. Antibiotiki 5 no.4:72-74 J1-Ag '60. (MIRA 13:9)

1. Kafedra infektsionnykh bolezney (zav. - prof. K.V. Bunin) I  
Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova.  
(ANTIBIOTICS) (ANTIGENS AND ANTIBODIES)  
(COMPLEMENT FIXATION)

KAHANOVA, Ye.A.; MORDVINOVA, N.B.; KUZNETSOVA, N.S.; MINDLINA, R.S.;  
BOTVINNIKOVA, M.Ye.; MIKHAYLOVA, Yu.M.

Result of the use use of luminescent sera in the diagnosis of  
dysentery and colienteritis. Zhur.mikrobiol.epid.i immun. 31  
30-35 N '60. (MIRA 14:6)

1. Iz Instituta epdiemiologii i mikrobiologii imeni Gamalei AMN  
SSSR, 12-y gorodskoy detskoy infektsionnoy bol'nitsy i I Moskov-  
skogo meditsinskogo instituta.

(DYSENTERY)

(ESCHERICHIA COLI)

(SERUM)

BULKINA, I.G.; BUNIN, K.V., prof.; KUZNETSOV, V.S.; MIKHAYLOVA, Yu.M.;  
NOVAKOVSKAYA, A.A.; POKROVSKIY, V.I.; POLUMORDVINOVA, Ye.D.; SEDLOVETS,  
M.P.; STARSHINOVA, V.S.; TSEYDLER, S.A.; SHKHAVTSABAYA, T.V.; YAKHON-  
TOVA, N.K.; SHERESHEVSKAYA, Ye.F., red.; ZUYEVA, N.K., tekhn. red.

[Pocket manual for the specialist in infectious diseases; clinical  
aspects, diagnosis, and treatment] Karmannyi spravochnik infektsioni-  
sta; klinika, diagnostika, lechenie. Moskva, Gos. izd-vo med. lit-ry  
Medgiz, 1961. 233 p. (MIRA 14:7)

(COMMUNICABLE DISEASES) (MEDICINE—HANDBOOKS, MANUALS, ETC.)

POKROVSKIY, V.I.; MIKHAYLOVA, Yu.M.

Effect of antibiotic allergy on Widal reaction titers. Antibiotiki  
6 no.2:138-141 P '61. (MIRA 14:4)

1. Klinika infektsionnykh bolezney (zav. - prof. K.V.Bunin)~I  
Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.  
Sechenova.

(TYPHOID FEVER)

(ANTIBIOTICS)

MIKHAILOVA, Yu.M. (Moskva)

Leucocyte picture in patients with toxic infection caused by  
salmonellosis. Klin.med. no.7:74-77 '61. (MIRA 14:8)

1. Iz kafedry infektsionnykh bolezney (zav. - prof. K.V. Bunin)  
I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.  
Sechenova.

(SALMONELLA)

(LEUCOCYTES)

MIKHALOVA, Yu.M.; MEL'NIK, Ye.G.

Effectiveness of antibiotic and sulfanilamide treatment of food  
toxicoinfections of salmonella origin. Sov. med. 25 no.7:131-133  
Jl '61; (MLA 15:1)

1. Iz kafedry infektsionnoy bolezney 1-go Moskovskogo ordena Lenina  
meditsinskogo instituta imeni I.M.Sechenova (zav. - prof. K.V.Bunin)  
i 1-y Moskovskoy infektsionnoy gorodskoy klinicheskoy bol'nitsy  
(glavnyy vrach N.G.Zalsekver).  
(ANTIBIOTICS) (SULFANILAMIDES) (SALMONELLA)  
(FOOD POISONING)



MEL'NIK, Y.G.; MIKHAYLOVA, Yu.M.

Clinical and laboratory parallels in food toxicoinfections caused by Salmonella. Zhur.mikrobiol., epid. i immun. 32 no.10:122-127 0 '61. (MIRA 14:10)

1. Iz kliniki infektsionnykh bolezney I Moskovskogo ordena Lenina meditsinskogo instituta i I-y infektsionnoy gorodskoy bol'nitsy.  
(FOOD POISONING) (SALMONELLA)

MIKHAYLOVA, Yu M.; VEBER, P.N.; BURKOVA, M.A.

Outbreak of food poisoning caused by B.Breslau. Zhur.mikrobiol.,  
epid. i imm. 32 no.10:127-128 0 '61. (MIRA 14:10)

1. Iz I Moskovskogo ordena Lenina meditsinskogo instituta im. Sechenova.  
(FOOD POISONING)

MIKHAYLOVA, Yu.M.; MEL'NIK, Ye.G.; STARSHINOVA, V.S. (Moskva)

Clinical laboratory characteristics of an outbreak of toxic  
food infection caused by Salmonella breslau. Klin.med. no.3:  
85-87 '62. (MIRA 15:3)

1. Iz kafedry infektsionnykh bolezney (zav. - prof. K.V.  
Bunin) i Moskovskogo ordena Lenina meditsinskogo instituta imeni  
I.M. Sechenova.

(SALMONELLA) (FOOD POISONING)

MIKHAYLOVA, Yu.M.; BUBLIKOVA, R.D.

Late results of Widal's reaction in those recovering from typhoid  
and paratyphoid diseases following treatment with antibiotics.  
Antibiotiki 7 no.8:761-764 Ag '62. (MIRA 15:9)

1. Kafedra infektsionnykh bolezney (zav. - prof. K.V.Bunin)  
I Moskovskogo orden Lenina meditsinskogo instituta imeni I.M.  
Sechenova.  
(TYPHOID FEVER--DIAGNOSIS--AGGLUTINATION REACTION)(PARATYPHOID FEVER)  
(ANTIBIOTICS)

BUNIN, K.V., prof.; MIKHAYLOVA, Yu.M.

Clinicodiagnostic parallels in food poisoning of salmonellal  
etiology and acute dysentery. Sov. med. 26 no.4:47-51 Ap '63.  
(MIRA 17:2)

1. Iz kliniki infektsionnykh bolezney (zav. - prof. K.V.  
Bunin) I Moskovskogo ordena Lenina meditsinskogo instituta  
imeni I.M. Sechenova na baze Moskovskoy infektsionnoy  
gorodskoy klinicheskoy bol'nitsy No.7 (glavnyy vrach N.G.  
Zaleskver).

MEL'NIK, Ye.G.; MIKHAYLOVA, Yu.M.

Bacterial excretion in food poisoning of salmonellae etiology.  
Zhur. mikrobiol., epid. i immun. 40 no.6:47-48 Je '63.

(MIRA 17:16)

1. Iz 1-go Moskovskogo ordena Lenina meditsinskogo instituta  
imeni Sechenova i Moskovskoy infektologii klinicheskoy  
bol'nitsy No.1.

MIKHAYLOVA, Yu.M.; VISSARIONOVA, V.Ya.

Therapeutic effect of purified properdin in experimental  
salmonella infections. Pat. fiziol. i eksp. terap. 9 no.1:64-65  
Ja-F '65. (MIRA 18:11)

1. Kafedra infektsionnykh bolezney I Moskovskogo ordena Lenina  
meditsinskogo instituta (zav. - prof. K.V. Bunin) i laboratorii  
fraktsionirovaniya belkov krovi (zav. - prof. G.Ya. Rozenberg,  
TSentral'nogo ordena Lenina instituta gematologii i perelivaniya  
krovi (direktor - dotsent A.Ye. Kiselev).

ALPHAYE WA, Yu M.

Also in "Handbook of the Soviet Union" (1974) by  
cy Salomonov, Moscow: P. 100. (1974)

- Y. A. L. (1974) "Handbook of the Soviet Union" (1974)
- Moscow: P. 100. (1974)
- S. Sechenov.



ROZENBERG, G.Ya.; VISSARIONOVA, V.Ya.; MIKHAYLOVA, Yu.M.; FAYUSH, M.D.;  
CHERNYAK, V.Ya.

Isolation of properdin from bovine blood serum and study of its  
properties. Biul. eksp. biol. i med. 60 no.11:45-48 N '65.

(MIRA 19:1)

1. Laboratoriya fraktsionirovaniya belkov krovi (zav. - prof.  
G.Ya. Rozenberg) TSentral'nogo ordena Lenina instituta gemato-  
logii i perelivaniya krovi (direktor - dotsent A.Ye. Kiselev i  
kafedra infektsionnykh bolezney (zav. - prof. K.N. Junin i Moskov-  
skogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova.  
Submitted October 11, 1963.

ACC NR: AP6029868

(A, N)

SOURCE CODE: UR/0399/66/000/008/0059/0063

AUTHOR: Krasil'nikova, A. M.; Mikhaylova, Yu. M.; From, A. A.; Sirotenko, A. V.

ORG: Municipal clinical infectious Hospital No. 7/Chief Physician N. O. Zalesk e / (Infektsionnaya gorodskaya klinicheskaya bol'nitsa no. 7); Department of Infectious Diseases/headed by Prof. K. V. Bunin/I Moscow Order of Lenin and Order of the Red Banner of Labor Medical Institute im. I. M. Sechenov (Moskovskiy meditsinskiy institut); Central Order of Lenin Institute of Hematology and Blood Transfusion/ Director Docent A. Ye. Kiselev/(Tsentral'nyy institut gematologii i perelivaniya krovi)

TITLE: Treating food poisoning with Polosukhin fluid and polyvinylpyrrolidone agents

SOURCE: Sovetskaya meditsina, no. 8, 1966, 59-63

TOPIC TAGS: food poisoning, disease treatment, drug ~~etc~~ effect, digestive drug, digestive system disease

ABSTRACT: Victims of food poisoning suffering from collapse were treated with Polosukhin fluid, administered intravenously in 300—500 ml doses (in fluid therapy with physiological salt solution and

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UDC: 616.9-022.38-039:616.3-008.1]-085.391

ACC NR: AP6029868

glucose solution, Cordiamin, caffeine, ephedrine, and sometimes mezaton or norepinephrine). Diagnosis was confirmed by laboratory identification of *Salmonella* bacteria in 47 of the 100 patients. Polosukhin fluid was generally effective against collapse caused by food poisoning except in 5% of cases, but produced side effects. Polyvinylpyrrolidone agents were given intravenously to 114 patients with acute food poisoning (not always in collapse) in a dose of 300 ml (in one variant also with Cordiamin, Caffeine, ephedrine, or mezaton). Polyvinylpyrrolidone agents proved to be rapid and effective detoxicants with no side effects. Polyvinylpyrrolidone agents detoxify by binding toxins in the blood vessels and by diuretic action. [WA-50; CBE No. 12]

SUB CODE: 06/ SUBM DATE: none/ ORIG REF: 003/ OTH REF: 003/

Card 2/2

MIKHAYLOVA, Yu.M.; VISSARIONOVA, J. Ya.

Nonspecific immunity in alimentary toxoinfections of *Salmonella*  
etiology. Zhur. mikrobiol., epid. i immun. 43 no. 1:70-73  
Ja '66. (MIRA 19:1)

1. I Moskovskiy ordena lenina meditsinskiy institut i Tsentral'nyy  
ordena Lenina institut gematologii i perelivaniya krovi. Sub-  
mitted January 11, 1965.

MISHAYLOVA, Yu.N.

Characteristics of the phagocytic reaction in typhoid and paratyphoid diseases treated by synthomycin and levomycetin. Zhur. mikrobiol.epid. i immun. 29 no.3:121 Mr '59. (MIRA 11:4)

1. Iz I Moskovskogo meditsinskogo instituta.  
(PHAGOCYTOSIS) (TYPHOID FEVER) (CHLOROMYCETIN)

3(0)

AUTHORS:

Anan'yev, A. R., Mikhaylova, Yu. V.

SOV/20-123-6-34/50

TITLE:

The Age of the Lower Part of the Minusinsk Series in Connection With the Discovery of *Lepidodendropsis hirmeri* Lutz in the Samokhval'skaya Suite (O vozraste otlozheniy nizhney chasti Minusinskoy serii v svyazi s otkrytiyem *Lepidodendropsis hirmeri* Lutz v Samokhval'skoy svite)

PERIODICAL:

Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 6, pp 1081 - 1084 (USSR)

ABSTRACT:

The Minusinsk Series ( former suite, up to 1800 m thick) of the precoal-bearing Lower Carboniferous is nowadays divided into 10 suites. Of these, the 3 lowest were assigned to the Tournaisian Stage, while the 3 higher lying suites, from Samokhval'skaya on, were put to the Upper Mississippian Stage (Ref 2). The lowest suite, the Bystryanskaya suite, belongs to the Upper Devonian as far as its lowest part is concerned, while its upper part, together with the Altayskaya, Nadaltayskaya and Samokhval'skaya suites actually belong to the Lower Mississippian. This is proved by new paleontological data of the authors as well as by the expeditions

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The Age of the Lower Part of the Minusinsk Series in SOV/20-121-6-34/50  
 Connection With the Discovery of *Lepidodendropsis hirneri* Lutz in the  
 Samokhval'skaya Suite

lead by M. I. Grayser. The boundary between the Upper Devonian and the Lower Carboniferous in the Minusinsk depressions is therefore to be drawn within the Bystryanskaya suite, according to the change of the flora. By this means, the notations: Bystryanskaya Mass I and II of the first investigators are re-established. The common occurrence of *Cyclostigma* and *Lepidodendron* in the Samokhval'skaya suite remained puzzling until recently and prevented an accurate age determination of this suite (Refs 8,10,20,21). The new discoveries of the authors, including the plant species mentioned in the title removed this obstacle: in reality, neither *Lepidodendron* nor *Cyclostigma* have been found here. The plant that was indentified by earlier investigators as *Lepidodendron*, is in the opinion of the authors *Sublepidodendron* (Nath.) *Hirner* and belongs to another species of *Sublepidodendroceae* (Ref 18). Many errors in identification originate in the different state of preservation of the bark of the very same plant species. Thus, *L.hirneri* has several synonyms (Refs 3,4,13,14)(Ref 20). *Neodendron Ghachl.* and

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The Age of the Lower Part of the Minusinsk Series in SOV, 20-123-6-14, 50  
Connection With the Discovery of *Lepidodendropsis hirmeri* Lutz in the  
Samokhval'skaya Suite

*Eremiodendron Chachl.* (Refs 8,9) are combined by the authors under the name *Caulopteris ogurensis* (Schmalh.) combin. nov. The *Lepidodendropsis* species belong to a flora which has a narrow stratigraphic range: from the upper part of the Upper Devonian to the lowermost part of the Lower Carboniferous (Ref 16). To the numerous evidences of a pre-Upper Mississippian age of *Lepidodendropsis*, still more are added (Refs 6,22). *Sublepidodendron distans* and *Caulopteris ogurensis* also indicate a pre-Upper Mississippian age for the Samokhval'skaya flora (Refs 11, 12). There are 2 figures and 22 references, 10 of which are Soviet.

ASSOCIATION: Tomskiy gosudarstvennyy universitet im. V. V. Kuybysheva  
(Tomsk State University imeni V. V. Kuybyshev)  
PRESENTED: July 18, 1958, by N. S. Shatskiy, Academician  
SUBMITTED: July 16, 1958

Card 3/3



BORODINA, M.L.; GOMOZOVA, V.G.; MIKHAYLOVA, Yu.V.; ZOLOTUKHINA, A.N.

Effect of nuclei used in the production of titanium dioxide  
on its pigmentary properties. Lakokras. mat. i kh. prim.  
no.4:16-21 '61. (MIRA 16:7)

(Titanium oxide) (Pigments)

ANAN'YEV, A.R.; KORDE, K.B.; MIKHAYLOVA, Yu.V.; PARFENOV, M.D.; SUKHOV, S.V.

Plantas. Trudy SNIIGGIMS no.21:220-247 '62.

(MIRA 16:12)

ACC NR: AP7003230

SOURCE CODE: UR/0056/66/051/006/1880/1892

AUTHOR: Mikhaylova, Yu. V.; Maksimov, L. A.

ORG: Moscow Physicotechnical Institute (Moskovskiy fiziko-tekhnicheskiy institut)

TITLE: Influence of the electric field on the transport coefficients of polar gases

SOURCE: Zh eksper i teor fiz, v. 51, no. 6, 1966, 1880-1892

TOPIC TAGS: kinetic equation, transport phenomenon, scattering cross section, temperature dependence, gas viscosity

ABSTRACT: The article deals with a kinetic equation of a gas made up of polar molecules of the symmetrical-top type or of polar diatomic molecules in the presence of a constant electric field. The kinetic equation is solved under the assumption that the polarization can be neglected and that the electric field can affect only the precession of the angular momentum. The kinetic equation is solved by a method described by one of the authors elsewhere (Maksimov, with Yu. Kagan, ZhETF v. 51, 1893, 1966 [Acc. AP7003231] and earlier). In view of lack of experimental data on the scattering cross sections of polyatomic molecules, the results are interpreted only for a few simple gas models. The heat conduction and viscosity tensors are determined and attention is called to the possible occurrence of viscous stresses in a gas in which a temperature gradient is produced. The similarity between the effect of an electric field and that of a magnetic field are discussed. The authors thank L. L. Gorelik and Yu. M. Kagan for interest in the work. Orig. art. has: 59 formulas.

SUB CODE: 20/ SUBM DATE: 05Jul66/ ORIG REF: 003/ OTH REF: 009

Card 1/1

USSR/Farm Animals - Small Horned Stock

Q

Abs Jour : Ref Zhur - Biol. N 11, 1958, 50345

Author : Zakharyan, G.P., Mikheylova, Z.F., Davtyan, G.G.

Inst : Armenian Scientific Research Institute of Animal Husbandry and Veterinary Medicine

Title : Digestibility of Feeds Treated with Carlide Slime by Sheep

Orig Pub : Byull. nauchn.-tekhn. inf. na Arm. n.-i. in-tu zhivotnovodstva i veterinarii, 1957, No 1, 17-20

Abstract : The digestibility of rations containing dry straw (first stage) and straw treated with a suspension of carlide slime (second stage) was determined in wethers. The coefficients of digestibility according to stages were: dry matter 63.8 and 73.2%, cellulose 49.3 and 68.3%, extractive substances without nitrogen 68.7 and 75.7%.

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Abs Jour : Ref Zhur - Biol., No 11, 1958, No 50009

Author : Gerasimyan E.A., Mikheylova Z.F.

Inst : Armenian Scientific Research Institute of Animal Husbandry

**APPROVED FOR RELEASE: 06/14/2000** **CIA-RDP86-00513R001134110007-3**

Title : The Effects of Rations with Variegated Grass Contents Upon the Feed Digestibility in Lactating Cows.

Orig Pub : Tr. Arm. n.-i. in-tu zhivotnovodstva i veterinarii, 1957, 2, 153-164

Abstract : One group of cows received a diet consisting of 90 percent of grass and 10 percent of concentrates, and another group received 70 percent, 20 percent, and 10 percent respectively of cotton plant peelings. The protein content was the same in all rations. Digestibility of the first diet was higher with respect of organic substances by 6.39 percent, with respect to proteins by 6.55 percent, and with respect to cellulose by 7.53 percent.

Card : 1/1



Separation of Uranium From A Sample of  
Metal by Ion Exchange Chromatography

1977

meth d. The effect of pH on the separation of the  
investigated cations is shown in Fig. 3.

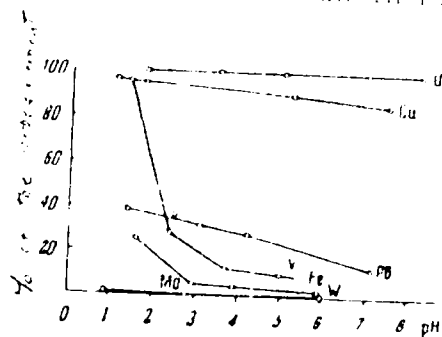
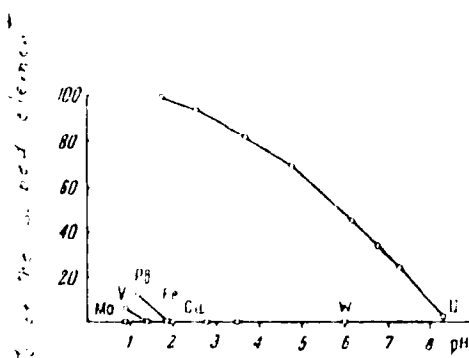


Fig. 3. Effect of pH on the separation of U, Cu, V, W, Fe(III), Cu, and Mo by ion exchange chromatography. III (all cations) are in equilibrium with the resin.

Card 2, 7

## Separation of Uranium From Actinoid Metals by Ion Exchange Chromatography

3. *My. l. - l. l.*

[illegible]

III. In the *Reich*, the *Reich* is the *Reich* of the *Reich*.

Card 3, 7

# Separation of Uranium from Thorium Metals by Ion Exchange Chromatography

1. The purpose of this investigation was to develop a method for the separation of uranium and thorium from their metal salts by ion exchange chromatography. The method developed in this investigation is based on the difference in the distribution coefficients of the two metals on a cation exchange resin.

The results of the investigation are presented in Table I. The distribution coefficients of the two metals on the resin are shown in the first two columns. The third column shows the separation factor, which is the ratio of the distribution coefficients of the two metals.

|       |       |       |
|-------|-------|-------|
| 10.0  | 9.95  | 1.005 |
| 12.0  | 12.53 | 1.044 |
| 12.50 | 12.53 | 1.002 |
| 13.4  | 13.4  | 1.000 |
| 13.4  | 13.4  | 1.000 |
| 13.4  | 13.4  | 1.000 |
| 15.4  | 15.22 | 1.012 |
| 12.50 | 12.50 | 1.000 |
| 50.0  | 50.8  | 1.016 |

Card 4 of 4



Separation of Uranium From Actinide  
Metals by Ion Exchange Chromatography

Table 1. (a) Target; (b) Found; (c) Yield; (d)  $\lambda_{max}$ ; (e)  $\lambda_{min}$   
Found in desorbed material (100%).

| (a)   | (b)   | (c)   | (d)   | (e)   | (f)   | (g)   | (h)   | (i)   | (j)   | (k)   | (l)   | (m)   | (n)   | (o)   | (p)   | (q)   | (r)   | (s)   | (t)   | (u)   | (v)   | (w)   | (x)   | (y)   | (z)   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 10.65 | 10.65 | 10.65 | 10.65 | 10.65 | 10.65 | 10.65 | 10.65 | 10.65 | 10.65 | 10.65 | 10.65 | 10.65 | 10.65 | 10.65 | 10.65 | 10.65 | 10.65 | 10.65 | 10.65 | 10.65 | 10.65 | 10.65 | 10.65 | 10.65 | 10.65 |
| 22.05 | 22.05 | 22.05 | 22.05 | 22.05 | 22.05 | 22.05 | 22.05 | 22.05 | 22.05 | 22.05 | 22.05 | 22.05 | 22.05 | 22.05 | 22.05 | 22.05 | 22.05 | 22.05 | 22.05 | 22.05 | 22.05 | 22.05 | 22.05 | 22.05 | 22.05 |
| 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |
| 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 |
| 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 |
| 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 |
| 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 |
| 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 | 10.05 |

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Separation of uranium from actinides  
Metals by Ion Exchange Chromatography

7/7/77  
D. W. W. 1-1-17-27

It was found that uranium, actinides, and other  
inert elements in the presence of 10% HCl  
III at pH 1.5-2.0, and the other elements  
amberlite MB3 mixed bed ion exchange resin  
under the following conditions: V, X, W, and Y  
are not separated from the mixture. The  
above conditions are: HCl, 10%, Amberlite MB3  
form (40-100 mesh, 100-200 microns), 100-200  
which was used. A. V. and A. W. are separated  
in the presence of 10% HCl, 10% HCl, 10% HCl;  
and IV, V, X, and Y are separated. The  
Czechoslovakian, A. V. and A. W. are separated.  
Krus, K. A., A. V., X, and Y are separated.  
Sed, H., A. V., X, and Y are separated.  
Blasch, W., K. A., A. V., X, and Y are separated.

ASSOCIATION:

V. I. Vornikova, L. I. Vornikova, L. I. Vornikova,  
Analytical Chemistry, A. V. and A. W. are separated.

SUBMITTED:

May 17, 1977

Card 7/7

MIKHAYLOVA, Z.M.; MIRSKIY, R.V.; YABUSHEINA, A.A.

Determination of bivalent and trivalent iron in difficultly  
decomposed rocks. Zhurnal.khim. 18 no.7:856-858 J1 '63.  
(MIRA 16:11)

1. Kuybyshevskiy nauchno-issledovatel'skiy institut neftyanoy  
promyshlennosti.

MIKHAYLOVA, Z.M.; MIRSKIY, R.V.; YARUSHKINA, A.A.

Determination of the forms of iron in difficultly decomposable  
rocks containing pyrites. Zav.lab. 30 no.4:407-408 '64.  
(MIRA 17:4)

1. Kuybyshevskiy gosudarstvennyy nauchno-issledovatel'skiy  
institut neftyanoy promyshlennosti.

saturated with antibiotics. Methods and results are presented for determinations of sensitivity of the disease agent isolated from 157 children suffering with dysentery, scarlet fever, pertussis, and various complications ordinarily encountered in these diseases. In the majority of patients there was complete correspondence between the sensitivity of the disease agent to antibiotics upon testing by the method of paper disks and the therapeutic effectiveness of the preparations. - N.S. Levzner

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134110007-

3000:

1/1

MIKHAYLOVA, Z.M. (Cand. of Med. Sci.); PEVZNER, N.S.;

"Method of Identifying Microbes That Respond the Antibiotics,"

p. 232 Ministry of Health USSR Proceedings of the Second All-Union Conference on Antibiotics, 31 May-9 June 1957. p. 405, Moscow, Medgiz, 1957.

1. MIKHAYLOVA, Z. M.

MIKHAYLOVA, Z.M.

Results of cultivating hemolytic streptococcus from scarlet fever patients under various conditions of hospitalization and penicillin therapy. *Pediatrics* 40 no.1:22-27 Ja '57. (MIRA 10:10)

1. Iz infektsionnogo otdela (zav. - chlen-korrespondent AMN SSSR sasluzhennyi deyatel' nauki prof. A.I.Dobrokhotova) Instituta pediatrii AMN SSSR (dir. - prof. O.D.Sokolova-Ponomareva)  
(STREPTOCOCCUS) (SCARLET FEVER) (PENICILLIN)



*MIKHAYLOVA, Z.M.*  
MASHKOV, A.V., MIKHAYLOVA, Z.M.

Simple method for obtaining an agglutinin from whooping cough  
cultures during the first phase. Lab. delo 4 no. 3:37-40 My-Je'58  
(MIRA 11:5)

1. Iz otdela ostrykh detskikh infektsiy (zav. - prof. A.I.  
Dobrokhotova [deceased]) Instituta pediatrii AMN SSSR, Moskva.  
(WHOOPIING COUGH)  
(ANTIGENS AND ANTIBODIES)

DERECHINSKAYA, Sh.L.; MIKHAYLOVA, Z.M.

Treatment of scarlatina in children with chronic tonsillitis [with summary in English]. *Pediatrics* 36 no.2:16-23 F '59.

(MIRA 12:4)

1. Iz otdela ostrykh detskikh infektsiy (zav. - chlen-korrespondent AMN SSSR prof. A.I. Dobrokhotova [deceased]) Instituta pediatrii AMN SSSR (dir. - chlen-korrespondent AMN SSSR prof. O.D. Sokolova-Ponomareva) na baze 2-y detskoy klinicheskoy bol'nitsy imeni I.V. Rusakova (glavnyy vrach - zasluzhennyy vrach RSFSR dots. V.A. Krugzhkov).

(SCARLET FEVER, ther.

in child. with chronic tonsillitis (Rus))

(TONSILLITIS, compl.

scarlet fever ther. in child. with chronic tonsillitis (Rus))

MIKHAYLOVA, Z.M.; DYADYUNOVA, I.V.

Changes in immunological and allergic reactivity during the course  
of the whooping cough infective processes. Zhur. mikrobiol. epid.  
i immun. 31 no. 5:7-12 My '60. (MIRA 13:10)

1. Iz Instituta pediatrii AMN SSSR.  
(WHOOPIING COUGH)

MASHKOV, A.V.; MIKHAYLOVA, Z.M.

Comparative antigenic activity of the first phase of a whooping  
cough culture and of an agglutidinogen obtained from this culture.  
Zhur. mikrobiol. epid. i immun. 31 no.7:103-108 J1 '60.

(MIRA 13:9)

1. Iz Instituta pediatrii AMN SSSR.  
(HEMOPHILUS PERTUSSIS)

MASHKOV, A.V.; MIKHAYLOVA, Z.M.

Comparative study of the sensitizing properties of first-phase  
pertussis culture and of the agglutinin obtained from it. Zhur.  
mikrobiol.epid.i immun. 31 no.8:129-131 Ag '60. (MIRA 14:6)

1. Iz Instituta pediatrii AMN SSSR.  
(WHOOPIING COUGH)

MASHKOV, A.V.; MIKHAYLOVA, Z.M.

Method of determining the properdin in human serum by the zymosan  
method. Zhur.mikrobiol.epid.i immun. 33 no.5:103-108 My '62.  
(MIFA 15:8)

1. Iz Instituta pediatrii AMN SSSR.  
(PROPERDIN) (ZYMOSAN)

MIKHAYLOVA, Z.M.

Correlation between the indices of specific and nonspecific  
immunity in whooping cough. Zhur. mikrobiol., epid. i immun.  
33 no.11:126-131 N '62. (MIRA 17:1)

1. Iz Instituta pediatrii AMN SSSR.

MIKHAYLOVA, Z.M.

Dynamics of the content of properdin in some acute infections  
in children. Zhur. mikrobiol., epid. i immun. 40 no.3:122-123  
Mr '63. (MIRA 17:2)

1. Iz Instituta pediatrii AMN SSSR.



MASHKOV, A.V.; MIKHAYLOVA, Z.M.; LEVINA, L.A.

Determining complement components in human serum. Zhur.  
mikrobiol., epid. i immun. 40 no.6:84-91 Je '63. (MIRA 12:6)

1. Iz Instituta pediatrii AMN SSSR.

YELISEYEV, A.I.; MIKHAYLOVA, Z.P.

Recent data on the upper Carboniferous of the Chernyshev  
Ridge. Dokl.AN SSSR 145 no.3:631-634 J1 '62. (MIRA 15:7)

1. Institut geologii Komi filiala AN SSSR. Predstalveno akademikom  
A.L.Yanshinym.  
(Chernyshev Ridge--Geology, Stratigraphic)

KRYUCHKOVA, P.I.; MIKHAYLOVA, Z.P.

New method for winding thinned yarn sections from the yarn  
holder. Khim. volok. no.3.73 '63. (MIRA 16:7)

1. ~~Moskovskiy~~ kombinat iskusstvennogo volokna.  
(Winding machines)

MIKHAYLOVA, Z.P.; SMIRNOVA, N.B.

Simplified method of bobbin feeding in doffing. Khim. volok. no.3:67-  
68 '65. (MIRA 18:7)

1. Klinskiy kombinat iskusstvennogo i sinteticheskogo volokna.

S/191/60/000/002/008/012  
B027/B058

AUTHORS: Li. P. Z., Mikhaylova, Z. V., Sedov, L. N., Eksanov, V. A.

TITLE: Laminated Plastics on the Basis of Glass Fiber.  
Communication V. Contact Method for the Forming of Large  
Products From Polyester Glass Plastics

PERIODICAL: Plasticheskiye massy, 1960, No. 2, pp. 29-35

TEXT: The authors describe contact forming of large products from polyester glass plastics as the simplest and most economic method, since hardening of unsaturated polyester resins is possible by addition of certain admixtures at room temperature. Molds from metal or glass plastic are best suited for the process; positive molds produce a smooth inner surface and negative ones a smooth outer surface; there are also multiple-part molds to facilitate the removal of complicate shape products; electrically heated molds are also used sometimes. In order to facilitate removal of the products from the molds, various separating agents are used, such as films from certain polymers (polyamide film ПК-4 (PK-4)), most frequently, however, alcoholic-aqueous solutions of polyvinyl alcohol, ✓

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Laminated Plastics on the Basis of Glass  
Fiber. Communication V. Contact Method for  
the Forming of Large Products From Polyester Glass Plastics

S/191/60/000/002/008/012  
B027/B058

but also mastic and pastes on wax- or paraffin basis. Various decorative coatings from resin with hardeners are applied to the mold by sprayer or brush. After the coating has gelatinized, the shredded glass fiber and resin with hardeners are attached by spraying machine or spray gun. When using glass fabric or glass mats, resin with hardener and accelerator as well as glass filler are laid in layers and each layer is rolled. The processing time for the resin of the type ПН-1 (PN-1) with active material and accelerator amounts to 40 to 90 min; inert fillers in powder form are sometimes admixed to increase viscosity and hardness. For the contact method, various types of glass fabrics may be used, which must previously be cut to shape, a larger edge having to remain, which facilitates removal from the mold. The glass fabric cut to shape is connected in the form of butt joints which must be covered by the next layer. Best durability of the products is obtained with a content of 40 to 50% polyethylene resin in glass plastic and 60 to 70% in glass mats. Smaller products are removed from the mold by hand and larger ones by machine, and undergo machine finishing. If a product consists of several parts, the best way of assembly is the simultaneous use of glued and mechanical joints. Subsequent

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Laminated Plastics on the Basis of Glass  
Fiber. Communication V. Contact Method for

S/191/60/000/002/008/012  
B027/B058

The Forming of Large Products From Polyester Glass Plastics

repair work is easy: it is sufficient to polish the defect with emery paper and to apply some layers of resin-saturated glass mat or glass fabric. When working with polyethylene resins, it must be considered that their evaporation leads to irritation of mucous membrane and thus a sufficient ventilation of the rooms is absolutely necessary; rubber gloves or skin-protecting cream are required. These resins are also inflammable so that fire extinguishing equipment should be available in the plant. Due to danger of explosion, hydrogen peroxide and the accelerator must in all cases be added to the resin separately. There are 8 figures, 4 tables, and 54 references: 1 Soviet, 24 German, 1 Swedish, 1 Japanese, 17 US, 2 British, 1 French, 3 Czechoslovakian, and 4 Polish. ✓

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S/191/60/000/003/002/013  
B016/B054

AUTHORS: Li, P. Z., Mikhaylova, Z. V., Sedov, L. N., Kaganova, Ye.L.

TITLE: Laminated Plastics on the Basis of Glass Fiber. Report 6.  
Effect of the Degree of Polycondensation of Polyester  
Resins and of the Concentration of Terminal Groups on the  
Properties of Resins and Glass-reinforced Plastics

PERIODICAL: Plasticheskiye massy, 1960, No. 3, pp. 9-12

TEXT: The authors report on their studies of the effect of the degree of polycondensation and acidity of polydiethylene glycol maleinate phthalate (3 : 2 : 1) on some properties of the solid solution of this resin in styrene ПН-1 (PN-1), as well as on the properties of glass-reinforced plastics when using this resin as a binder. The authors had conducted the synthesis of the resin, and had published it earlier together with indices (Refs. 1,2). They found that polyester resins of different polycondensation degrees (acid number 20-100 mg KOH/g) in the presence of industrial isopropyl benzene hydrogen peroxide (3%) and HK (NK) accelerator (8%) gelatinize faster with increasing molecular

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Laminated Plastics on the Basis of Glass Fiber. Report 6. Effect of the Degree of Polycondensation of Polyester Resins and of the Concentration of Terminal Groups on the Properties of Resins and Glass-reinforced Plastics S/191/60/000/003/002/013 B016/B054

weight and decreasing acidity. This phenomenon was ascribed to: 1) extension of macromolecules of the unsaturated polyester increases the probability of copolymerization with styrene; 2) increased acidity inhibits the dissociation of the hydrogen peroxide; the free carboxyl groups of the polyester have a deactivating effect; 3) possible isomerization of maleic to fumaric acid (Ref.5). The authors keep on studying this problem. Simultaneously with the acceleration of gelatinization, the polyesters solidify to a higher degree, and their hardness and resistance to water increase. Further, it is shown that the mechanical strength of resins increases with increasing molecular weight of the initial polymer. This effect also prevails in T-1 (T-1) glass-reinforced polyester plastics. Tensile strength and resistance to static bending are practically independent of the degree of acidity and polycondensation of the binding resin. It is noted that the dielectric properties of glass-reinforced plastics depend chiefly on water absorption.  $\tan \delta$  for specimens with binding resins of an acid number of 70 mg KOH/g is much larger than with resins of 43.3 and 28 mg KOH/g.

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Laminated Plastics on the Basis of Glass Fiber. S/191/60/000/003/002/013  
Report 6. Effect of the Degree of Polycondensa- B016/B054  
tion of Polyester Resins and of the Concentration of Terminal Groups on  
the Properties of Resins and Glass-reinforced Plastics

The bending strength of glass-reinforced plastics decreases in water. The concentration of the terminal groups of the binder has its main influence when the specimen is immersed into water. The authors' results confirm the correctness of their choice of the final acid numbers (20-45 mg KOH/g) for resins used in the production of glass-reinforced plastics. There are 6 figures, 3 tables, and 6 references: 2 Soviet, 1 German, 1 US, and 2 British. X

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87922

S/191/60/000/004/003/015  
B016/B058

15 8340

2209

AUTHORS: Li, P. Z., Mikhaylova, Z. V., Sedov, L. N.,  
Petrilenkova, Ye. B., Libina, S. L.

TITLE: Laminated Glass-reinforced Plastics. Report VIII. A Polyester  
Binding Agent for Glass-reinforced Plastics

PERIODICAL: Plasticheskiye massy, 1960, No. 4, pp. 9-12

TEXT: The authors describe polypentaerythrite dichlorohydrin maleinate phthalate (PDP), which was synthesized for the first time. It was the purpose of the study to widen the raw-material basis of polyvalent alcohols for the synthesis of unsaturated polyester resins by using polypentaerythrite. In contrast with the inadequate methods known, the authors proved that unsaturated polyesters with higher fire resistance can be synthesized by using a chlorine-containing alcohol component. For the polycondensation they used pentaerythrite dichlorohydrin (PED), which is formed by saponification of the reaction product of pentaerythrite and thionyl chloride in the presence of pyridine. PDP was synthesized from PED by adding maleic acid and phthalic anhydride (molar ratio 1.0 : 0.5 : 0.5) in

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Laminated Glass-reinforced Plastics.  
Report VIII. A Polyester Binding Agent for  
Glass-reinforced Plastics

S/191/60/000/004/001/011  
B016/B058

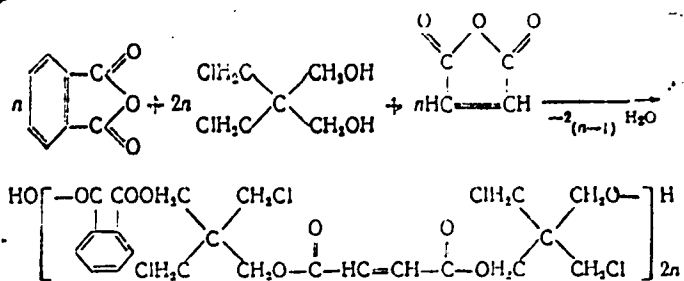
the inert gas at 170-190°C (see scheme). The resin yield was 80 to 90 % of the total content of all components. After solidification, PDP mixed with 1/5 styrene gives a product that is difficultly combustible and stops burning after removal of the flame. The product from 70 parts by weight of PDP and 30 units of styrene is still less combustible. PDP may be mixed with methyl methacrylate at any proportion, and its solution in styrene (45 : 55) does not tend toward stratification. Its solutions are gelatinized at room temperature within three hours in the presence of 6% isopropyl benzene hydrogen peroxide and 8% of the accelerator HW(NK). This also occurs within 15 minutes in the presence of 3% methyl-ethyl ketone peroxide and 3% NK. From PDP and glass fabric T<sub>1</sub> (T<sub>1</sub>), the authors produced

samples of self-extinguishing glass textolite, which are superior to the product from styrene resin ПН-1 (PN-1) with respect to their most important mechanical and insulation properties. The authors prepared a test sample of higher transparency from PDP and glued glass mat. Papers by G. S. Petrov, K. A. Andrianov, and S. I. Dzhennel'skaya (Ref. 2), as well as G. S. Petrov and K. N. Vlasova (Ref. 3) are mentioned. There are 5 figures, 2 tables, and 7 references: 5 Soviet, 1 French, and 1 German.

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S/191/60/000/004/003/015  
B016/B058



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84353

S/191/60/000/008/002/014  
B004/B056

IS.8109 2109.2209

AUTHORS: Li, P. Z., Mikhaylova, Z. V., Sedov, L. N.

TITLE: Laminated Plastics on the Basis of Fiber Glass. Report XI.  
The Influence of the Content of Monomers Upon the Properties  
of Unsaturated Polyester Resins and Glass Plastics With  
Polyester Binders

PERIODICAL: Plasticheskiye massy, 1960, No. 8, pp. 7-16

TEXT: The authors investigated the influence exerted by the content of monomers upon the properties of unsaturated polyester resins. According to Refs. 8-10, the following resins were synthesized (Table 1): polyethylene glycol maleate (1), polyethylene glycol maleate dipinate (2), polyethylene glycol maleate phthalate (3a and 3b), polyethylene glycol maleate diphenate (4), polypentaerythrite dichlorohydrin maleate dipinate (5), and polypentaerythrite dichlorohydrin maleate phthalate (6). These polyesters were dissolved in styrene or triethylene glycol dimethacrylate of the type TGM-3 (TGM-3). They were gelatinized at 20°C in the presence of isopropyl benzene hydroperoxide and HK(NK) accelerators. The following

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Laminated Plastics on the Basis of Fiber Glass. 3/191/60/000/008/002/014  
Report XI. The Influence of the Content of B004/B056  
Monomers Upon the Properties of Unsaturated  
Polyester Resins and Glass Plastics With  
Polyester Binders

results are given: The specific gravity as a function of the concentration at 20°C is no linear function (Fig. 1); on the other hand, it decreases linearly with increasing temperature (Fig. 2). Viscosity at 25°C (Figs. 3-5) does not obey the equation by Frenkel' (Ref. 11), but the equation  $\log \eta = a - b \log t$  (Fig. 6) ( $\eta$  = viscosity in centipoise;  $t$  = temperature in °C;  $a, b$  = constants). For 67% solutions in styrene the following equation is given:  $\eta \approx a/t^2$ . The authors discuss the data published on the hardening of polyester resins and arrive at the conclusion that the copolymerization of polyester with styrene must be considered to be the main process. They investigated the rate of gelatinization (Fig. 7) which has a minimum at 25-28% of styrene and a maximum at 32-43% of styrene, the dependence of the specific gravity of the hardened resin (Fig. 8) and of the shrinkage (Fig. 9) of the content of monomers. Shrinkage of the styrene copolymer was proportional to the styrene content only between 15-20 and 45-50%, whereas the resins containing TGM-3 showed a low shrinkage that was proportional to its content. In order to determine the

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Laminated Plastics on the Basis of Fiber Glass. 3/191/60/000/008/002/014  
 Report XI. The Influence of the Content of 3004/B056  
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 Polyester Binders

optimum styrene content, the authors determined the thermal stability according to Vicat (Fig. 10), the hardness by means of I. F. Kanavet's press (Fig. 11), and the extractability by means of acetone (Fig. 12), while the water adsorption (Fig. 13) was determined as a function of the styrene content: Table 2, comparison between the optimum styrene content in solutions of polyester resins with the styrene quantity which is equivalent to the content of double bonds of the polyester:

| Styrene content in % by weight: Polyester:             | 1    | 2    | 3a   | 3b   | 4    | 5    | 6    |
|--------------------------------------------------------|------|------|------|------|------|------|------|
| Equivalent to the double bonds                         | 34.3 | 30.2 | 25.2 | 23.5 | 24.8 | 17.0 | 16.7 |
| Optimum on the basis of the thermal stability          | 32.5 | 30.0 | 30.0 | 26.0 | 48.0 | 40.0 | 40.0 |
| Optimum on the basis of the Brinell hardness           | 38   | 37.5 | 37.5 | 37.5 | 37.5 | 37.5 | 37.5 |
| Optimum of the basis of extraction by means of acetone | -    | 30   | 37.5 | -    | 40   | 40   | 40   |

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Laminated Plastics on the Basis of Fiber Glass. 3/191/66/000/009/002/014  
Report XI. The Influence of the Content of Monomers Upon the Properties of Unsaturated Polyester Resins and Glass Plastics With Polyester Binders

The mechanical strength as a function of the styrene content was determined for (3) and (6) (compression strength, Fig. 14; bending strength, Fig. 15). The maxima at 38% styrene apply also to glass textolite (Figs. 16 and 17). Table 3 lists the insulating properties of glass textolites, which also show maxima at 38% styrene ( $\tan \delta = 0.014$ , disruptive voltage 17.9 kv/mm). As the properties of glass plastics depend on saturation, the type ПН-2 (PN-2) is recommended among the types of resin developed at the NIIPM (Scientific Research Institute of Plastics), which has a centipoise of about 7000 for saturation under pressure and at increased temperature, and the types ПН-1 (PN-1), ПН-3 (PN-3), and ПН-4 (PN-4) (maximum of 1000 centipoise) for saturation at room temperature. L. A. Nikitina and Ye. B. Petrilenkova, both undergraduate students of MITKhT (Moscow Institute of Fine Chemical Technology) took part in the synthesis. There are 17 figures, 3 tables, and 19 references: 5 Soviet, 2 US, 3 British, 1 Czechoslovakian, 5 German, and 2 Japanese.

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5

S/121/60/000/103/011/010  
B013/B055

AUTHORS: Iskra, Ye. V., Shtaykhman, G. A., Li, P. Z., Mikhaylova, Z. V.,  
Sedov, L. N., Al'shits, I. M., Kats, L. F., Papysheva, Ye. V.,  
Eksanov, V. A.

TITLE: Glass Fiber Laminates 12. Dyeing of Polyester Glass  
reinforced Plastics

PERIODICAL: Plasticheskiye massy, 1960, No. 9, pp. 11 - 12

TEXT: The present work deals with the dyeing of glass-reinforced polyester plastics and the dyes used for this purpose. The investigation showed that polyester resins may be colored satisfactorily with azo-, anthraquinone-, and triphenyl-methane dyes, phthalocyanine pigments, and others. The results obtained with several vat dyes and direct dyes were unsatisfactory. Inorganic pigments and dyes gave less brilliant hues than organic colorants. The results of the investigation showed that most dyes retard the gelling process. This retardation, however, is comparatively insignificant so that the properties of the hardened resin are hardly affected. To obtain well-colored products, the resin is generally applied

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S/11/60/0001011003/016  
B013/B054

15.8109

AUTHORS:

Li, P. Z., Mikhaylova, L. V., Sedov, L. M. Kaganova, Ye. L. .  
Geftter, Ye. L.

TITLE:

Laminated Plastics on Glass Fiber Basis. Report 13. A New  
Binder on the Basis of Unsaturated Polyester Resins With  
Addition of an Organophosphorus Compound

PERIODICAL: Plasticheskiye massy, 1960, No. 11, pp. 9 - 10

TEXT: The authors studied the possibility of producing incombustible resins with the use of dichloro-diethyl ester of vinyl phosphinic acid (DE). Dichloro-diethyl ester was synthesized by Ye. L. Geftter. Experiments with the use of DE with usual resins gave no satisfactory results. Its use with chlorine-containing polyester resins is much more promising. The effect of organophosphorus admixtures on the properties of chlorine-containing resin is shown in Table 1. Hence, it appears that with addition of small DE amounts the properties of resin remain practically unchanged except for the gelation rate. Some physicomachanical properties of glass-reinforced

Card 1/2

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Laminated Plastics on Glass Fiber Basis.  
Report 13. A New Binder on the Basis of  
Unsaturated Polyester Resins With Addition  
of an Organophosphorus Compound

S/191/60/000/011/003/016  
B013/B054

plastics from chlorine-containing polyester resin, with and without DE addition, are given in Table 2. The refractoriness of samples of glass-reinforced plastics was tested by exposing the sample to an open flame for a definite time, and - after removal of the flame - determining the duration of independent burning and glowing of the sample, as well as the loss in weight (Table 3). Combustibility of glass-reinforced plastics was little reduced by the addition of DE to the general-purpose resin of the type ПН-1 (PN-1). On the other hand, an introduction of small DE amounts into chlorine-containing resin, which is only slowly extinguished after removal of the flame, warrants the production of hardly combustible glass reinforced plastics. There are 1 figure, 3 tables, and 3 references:  
1 Soviet, 1 US, and 1 British.

Card 2/2

LASKINA, Ye.D.; SIMANOVSKAYA, E.A.; BELOV, V.N.; BYCHKOVA, Z.N.;  
SHILINA, R.F.; YEMEL'YANENKO, Z.T.; MIKHAYLOVA, Z.V.

Intermediate products of the synthesis of odorous substances.  
Report No.10: Preparation of guaiacol, guäthol, veratrole, and  
o-diethoxybenzene from pyrocatechin. Trudy VNIISNDV no.5:25-30  
'61. (MIRA 14:10)

(Piperonal)

S/081/62/000/021/049/069  
B162/B101

AUTHORS: Li, P. Z., Mikhaylova, Z. V., Sedov, L. N.

TITLE: Unsaturated polyester resins

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 21, 1962, 449, abstract  
21P18 (Vest. tekhn. i ekon. inform. N.-i. in-t tekhn.-ekon.  
issled. Gos. kom-ta Sov. Min. SSSR po khimii, no. 11, 1961,  
51-60)

TEXT: Synopsis. Synthesis, properties, the methods of curing of poly-  
ester resins and also the properties of cured unsaturated polyester resins  
are described. 55 references. [Abstracter's note: Complete translation.]

Card 1/1

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22419  
S/191/61/000/012/003/007  
B101/B110

AUTHORS: Li, P. Z., Mikhaylova, Z. V., Sedov, L. N., Kostygov, V. A.  
TITLE: Synthesis and examination of unsaturated N-bis-β-hydroxy-ethyl  
aniline polyester resins  
PERIODICAL: Plasticheskiye massy, no. 12, 1961, 11-14

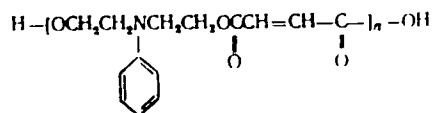
TEXT: This paper deals with the synthesis and examination of unsaturated polyester resins whose water resistance was increased by aromatic components. N-bis-β-hydroxy-ethyl aniline (diethanol aniline) was used as initial substance. The synthesis was conducted by esterification of commercial diethanol aniline (melting point: 53-55°C) with maleic or maleic + phthalic acids. The compounds were fused at  $175 \pm 2^\circ$  in a CO<sub>2</sub> atmosphere. The reaction course was observed by determining the acid number. After 35-45 min, the compounds were cooled down to 13-15°C, 0.02% of hydroquinone was added as stabilizer, and they were cooled down to room temperature. Reaction time was 3-5 hr, and the yield approximately 95%. Structures

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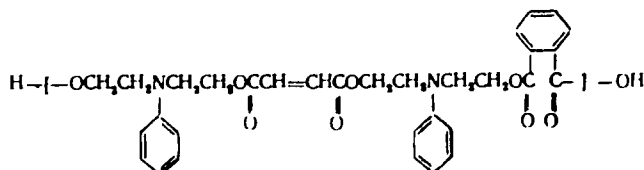


Synthesis and examination ...

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B101/B110



(I)



(II)

are given for the resins obtained. Polyester (I) is a reddish-brown, transparent resin with a softening point of about 125°C, a molecular weight of 1250, and a maximum compatibility with styrene of 58%. Polyester (II) is orange-red and has a molecular weight of 1600. Both resins are soluble in organic solvents and have a specific gravity of 1.276. The authors studied the physicochemical properties of the copolymers of (I) and (II) with styrene and the following initiators: (a) benzoyl peroxide; (b) AIBN.

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100/100

# Synthesis and examination

isopropyl benzene hydroperoxide; (c) 10% solution of methyl-ethyl ketone peroxide in dimethyl phthalate; (d) isopropyl benzene hydroperoxide + HK (NK) accelerator containing approximately 0.7% Co; (e) methyl-ethyl ketone peroxide + NK. Initiators (a)-(c) were used at 100°C, combinations (d) and (e) at 20°C. Table 4 gives physicomachanical data for the resins obtained. The authors found: (1) Synthesis is almost 50% shorter than with diethylene glycol; (2) compatibility with styrene is higher than for diethylene glycol or ethylene glycol resins; (3) at 100°C, hardening of (1) in the presence of benzoyl peroxide is very slow (> 5000 min); (4) inhibition by an excess of amine groups; (5) at 100°C, fast gel formation sets in (5-5 min) in the presence of benzoyl peroxide, but hardening is incomplete. The Brinell hardness remains low; (6) the optimum at 100°C was 1-4% methyl-ethyl ketone peroxide with 2-4% NK; at 100°C, 1-2% isopropyl benzene hydroperoxide; (6) with both resins, cross linking is induced by a temperature elevation from 20 to 100°C; (7) shrinkage increases linearly with increasing styrene content; (8) the water resistance of synthesized resins is very high. This confirms the assumption that water-resistant polyester resins are obtained by using aryl-containing alcohol components. Papers by K. D. Petrov, G. B. Tal'kovskiy (Chikh, 1971).

Card 3/5

### Synthesis and examination

567, 1225 (1952); 26, 1305 (1951) are mentioned. There are 3 figures, 5 tables, and 5 references. 1 Soviet and 3 non-Soviet. The two most recent references to English-language publications read as follows: R. N. Fuoss, D. Edelson, J. Polymer Sci., 6, 537 (1951); L. H. Vacker, Plast. Inst. Trans. and J., 26, No. 10, 7 (1951).

Table 4. Physicomechanical properties of hardening products obtained from styrene solutions of polyester I, and II.

Legend. (A) Characteristics; (B) solution of (I); (C, solution of (II); (a) percentage of styrene in the initial solution; (b) shrinkage during hardening, %; (c) specific gravity,  $g/cm^3$ ; (d) Brinell hardness,  $kg/mm^2$ ; (e) limit of bending strength,  $kg/cm^2$ ; (f) modulus of elasticity; (g) bend  $kg/cm^2$ ; (h) specific impact strength,  $kg \cdot cm/cm^2$ ; (i) therm. stability according to Vicat. °C; (j) therm. stability according to Martens. °C; (k) water absorption for 24 hr. %; (l) amount of substance extracted with acetone in a Soxhlet apparatus for 24 hr. %

Car 4/5

S/191/62/000/005/004/012  
2110/2101

AUTHORS: Li, P. B., Kaganova, Ye. L., Mikhaylova, Z. V.

TITLE: Self-extinguishing incombustible polyester resins

PERIODICAL: Plastics Engineering, No. 5, 1967, 10-15

TEXT: Self-extinguishing polyesters were obtained by: (1) special admixtures, (2) chemical modification. By adding  $\text{Sb}_2\text{O}_3$  (14.3%) and PVC resins (6.7-7.9%) to  $\text{TN}-1$   $\text{TN}-1$  resin, glass reinforced plastics made therefrom on the basis of glass fabric  $\text{G}_1$  (G<sub>1</sub>) showed worse physical-mechanical properties, reduced impact strength, increased viscosity and opacity. Modification was based on the principle of introducing chlorine atoms into the polymer molecule. Bisphenol glycol was polycondensed with maleic and tetrachlorophthalic anhydride (ratio 1:1:0.5:0.5) in the melt at 160, 180 and 200°C in inert gas atmosphere. The reaction started at 135°C, the acid number of 35-40 mg KOH/g was reached after 4.5 hr at 200°C, which proves the high reactivity of tetrachlorophthalic anhydride. Polycondensation was a reaction of second order. Its rate constants in

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3110/0101

Self-extinguishing unsaturated ...

$\text{g} \cdot \text{mole}^{-1} \cdot \text{min}^{-1}$  were: 1.81 at  $100^\circ\text{C}$ , 1.02 at  $105^\circ\text{C}$  and 0.5.91 at  $100^\circ\text{C}$ , its activation energy  $\sim 17.2 \text{ kcal/mole}$ , the yield 43-45%. The brown, solid polycondensate is soluble in styrene, methyl methacrylate and polyester acrylates. A 30% styrene solution of polyethylene glycol maleinate tetrachlorophthalate was best. Methyl-ethyl ketone peroxide combined with cobalt naphthenate and the redox system p-benzoyl peroxide-dimethyl aniline served as hardeners. Addition of  $\text{SiO}_2$  increases the fire-resistant quality of the resins and does not change the physical-mechanical properties of glass reinforced textolites produced from them, which correspond to those produced from 11-1. Moreover, ethyleneglycol was polycondensed with maleic anhydride and endomethylene hexachloro tetrahydrophthalic anhydride (I) at a molar ratio of 1.1:0.5:0.5 and  $180^\circ\text{C}$ . The reaction was here  $\sim 1.00 \text{ g} \cdot \text{mole}^{-1} \cdot \text{min}^{-1}$ . The condensate is a solid, brown resin, easily soluble in styrene, methyl methacrylate, polyester acrylates, etc. A curing agent for maximum hardening is still being sought. Replacement of ethylene glycol by diethylene glycol and increase of the amount of maleic anhydride improved the mechanical properties of the corresponding glass reinforced textolites ( $T_g$ ). 0.6 mole I, 0.4 mole

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B110/P101

Self-extinguishing unsaturated ...

maleic anhydride, 0.5 mole ethylene glycol and 0.5 mole diethylene glycol with an addition of 2.91%  $\text{Sb}_2\text{O}_3$  showed 450  $\text{kgf/cm/cm}^2$  impact resilience, 1750  $\text{kgf/cm}^2$  static bending strength, 750  $\text{kgf/cm}^2$  compression strength limit, 139,500  $\text{kgf/cm}^2$  modulus of elasticity, heat resistance according to Martens of 74°C, water absorption in 24 hrs of 0.32%. Experiments in the burning tube showed that fireproof glass plastics were obtained: (1) with PN-1 resin with additions of 11.5-14.5%  $\text{Sb}_2\text{O}_3$  and chlorine containing compounds (6.4-7.9% Cl); (2) on the basis of resin modified with tetrachlorophthalic anhydride and with an addition of ~3%  $\text{Sb}_2\text{O}_3$ ; (3) with resin modified by means of I (~39% Cl) and slight  $\text{Sb}_2\text{O}_3$  admixtures. There are 4 figures and 9 tables.

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S/191/63/000/001/003/017  
B101/B186

AUTHORS: Mikhaylova, Z. V., Li, P. Z.

TITLE: Use of three-component systems to initiate the copolymerization of unsaturated polyesters with styrene

PERIODICAL: Plasticheskiye massy, no. 1, 1963, 12-18

TEXT: Using Western research data, e.g. those described by J. W. Cywinski (Appl. Plast., 3, no. 2, 56 (1960), Reinf. Plast., 4, no. 6, 5 (1960)), the authors investigated how initiators containing a promotor or "coaccelerator" as third component affect the copolymerization of polydiethylene glycol maleinate phthalate with styrene. The redox systems isopropyl benzene hydroperoxide + cobalt naphthenate (I); methyl ethyl ketone peroxide + cobalt naphthenate (II); cyclohexanone peroxide + cobalt naphthenate (III); and benzoyl peroxide + dimethyl aniline (IV) were studied. Dimethyl aniline (DMA) was added as promotor to the initiators I, II, and III, and cobalt naphthenate to the system IV. Results: The gel formation time was reduced to 1/5 - 1/50 by the systems I, II, and III with promotor for 65% solutions of polyester in styrene. Without  
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B101/B186

Use of three-component systems ...

promotor, gel formation took about 220 min. Hardness increased more quickly in the presence of the promotor. With I + DMA, the Brinell hardness was 17.7 kg/mm<sup>2</sup> after 24 hrs, without DMA this constant value was reached after 14 days. Large additions of DMA (0.3%) reduced the hardness again (about 12 kg/mm<sup>2</sup>). In the presence of the promotor the heat resistance increased and the fraction extractable with acetone decreased. Optimum was 0.005-0.1% DMA with 1% initiator. In system IV, the addition of cobalt naphthenate did not affect the rate of gel formation and the hardness. Conclusion: DMA can be recommended to improve the effect of I on polyester resins, particularly for the curing of resins containing methyl methacrylate and diacrylates. Quick-curing compositions usable as glues, cements, and binders for reinforced plastics can be produced with II, III, and promotor. Experiments made below 20°C showed that the promotor eliminates the disturbing effect of low temperatures. Gel formation with II + DMA took 8-11 min at 0-20°C while no gel formation occurred with II without DMA. Polyester resins cured with promotor at 0-8°C reached about 12 kg/mm<sup>2</sup> Brinell hardness and about 140°C Vicat thermostability after 30 days. About 9 kg/mm<sup>2</sup> and about 110°C were reached with IV without promotor at these temperatures. Conclusion: Three-

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Use of three-component systems ...

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B101/B186

component systems containing DMA can be used to cure polyester resins at low temperatures. The synergistic effect of systems containing two peroxides as described by Cywinski (ibid.) and J. B. Harrison et al. (Mod. Plast., 39, no. 5, 135 (1962)) was also studied. In contrast to the data found by these research workers, the curing was not accelerated by systems of I, II, and III plus benzoyl peroxide. There are 11 figures and 4 tables.

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L 9840-63

ZPR/EWP(s)/EPP(c)/EXT(x)/BDS/ES(x)-2--APFTC/ASD/SSD--Pg-1/Pc-1/

Pr-1/Pt-1--RM/MM/MAY

ACCESSION NR: IP3000396

S/0191/63/000/005/0015/0019

81

AUTHOR: Li, P. Z.; Mikhaylova, Z. V.; Makarova, Yu. S.

TITLE: Unsaturated polyesters based on 2,2-bis(chloromethyl)-1,3-propanediol

SOURCE: Plasticheskiye massy\*, no. 5, 1963, 15-19

TOPIC TAGS: 2,2-bis(chloromethyl)-1,3-propanediol, ethylene glycol, diethylene glycol, maleic anhydride, chloroendic anhydride, tetrachlorophthalic anhydride, unsaturated polyesters, polycondensation, reactivity polyester solutions, glass-fabric reinforced plastics, fire resistance, self-extinguishing, heat-resistance

ABSTRACT: <sup>15</sup> <sup>15</sup> <sup>15</sup> Fire-resistant polyesters and glass-fabric-reinforced plastics based on 2,2-bis(chloromethyl)-1,3-propanediol (BCMPD), alone or with ethylene or diethylene glycol (EG or DEG), and maleic (MA), chloroendic (CA), or tetrachlorophthalic (TCPA) anhydride have been prepared. The polyesters were synthesized by polycondensation of the starting materials under an inert gas at 180 to 205C until an acid number of 38 to 42 mg KOH/g resin was attained.

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ACCESSION NR: AP3000396

Study of the polycondensation kinetics using the starting materials in various ratios showed that the reactivity of BCMFD approaches that of DEG but is lower than that of EG, and that the activity of the anhydrides in reactions with BCMFD decreases in the order MA is greater than CA is greater than TCPA. Polyesters synthesized from BCMFD, EG, DEG, MA, CA, and TCPA in various molar ratios are transparent substances ranging in color from yellow to dark brown, with melting points of 40 to 83°C. Polyesters modified with CA or TCPA and containing EG or DEG are readily soluble in styrene, methyl methacrylate, dimethyl acrylate, and other monomers. Polyester-styrene solutions can be cured by various redox systems at room temperature. The products are fire and water resistant and have a Brinell hardness of 11.5 to 22 kg/cm<sup>2</sup> and a Martens heat resistance of 64 to 74°C. Glass-fabric-reinforced plastics made with the above polyesters and various glass fabrics are self-extinguishing and water resistant and exhibit in most cases a Martens heat resistance greater than 250°C. They have at 20°C a bending strength of 1436 to 3853 kg/cm<sup>2</sup> and a compressive strength (parallel to the layers) of 570 to 2195 kg/cm<sup>2</sup>; 77.5 to 100% of this strength is retained at 80°C. Orig.

Card 2/3

LI, P.Z.; MIKHAYLOVA, Z.V.; KAGANOVA, Ye.L.

Curing of unsaturated chlorine-containing polyester resins  
by means of the oxidation-reduction systems benzoyl peroxide -  
tertiary amines. Plast. massy no.8:13-16 '63. (MIRA 16:8)

(Resins, Synthetic) (Benzoyl peroxide) (Amines)